

**Work Order ID 105320**

August-01-13 11:23:32 AM

**\*105320\***

Page 1

Item ID: D3136-043

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Window Assembly

Stop

**\*NS2\***

Start Date: 8/01/13 Start Qty: 4.00

**\*4\***

Cust Item ID:

Required Date: 8/01/13 Req'd Qty: 4.00

**\*4\***

Customer:

Reference:

|            |                         |                      |            |       |           |              |
|------------|-------------------------|----------------------|------------|-------|-----------|--------------|
| Approvals: | Process Plan: <i>PL</i> | Date: <i>13-08-1</i> | Tooling:   | Date: | Run Start | <b>*NR1*</b> |
| QC:        |                         | Date:                | SPC (Y/N): | Date: | Stop      | <b>*NR2*</b> |

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr                 | Revision Nbr  |      |  |  |  |  |  |  |  |
|--------------------------|---|------|--|--|--|--|--|--|--|
| D3136                    | Rev E   |      |  |  |  |  |  |  |  |
| 100                      |   | 0.00 |  |  |  |  |  |  |  |
| <b>*100*</b><br>Waterjet | FLOW WATER JET  |      |  |  |  |  |  |  |  |
|                          | Memo  | 0.00 |  |  |  |  |  |  |  |
|                          | 1-Cut as per Dwg<br>Dwg Rev: <i>E</i><br>Prog Rev: <i>E</i> |      |  |  |  |  |  |  |  |
| 110                      | FLOW CNC Waterjet<br><i>Flexiglass C. 125"</i>              |      |  |  |  |  |  |  |  |
| <b>*110*</b><br>QC       | QC2- Inspect parts off machine FAI/FAIB                     | 0.00 |  |  |  |  |  |  |  |
|                          | Memo  | 0.00 |  |  |  |  |  |  |  |
|                          | Quality Control   |      |  |  |  |  |  |  |  |
| 120                      | QC8- Inspect parts - second check                           | 0.00 |  |  |  |  |  |  |  |
| <b>*120*</b><br>QC       | Memo  | 0.00 |  |  |  |  |  |  |  |
|                          | Quality Control   |      |  |  |  |  |  |  |  |

*6 0 JmB:10-27**JmB:10-27**HJ  
13/10/28*

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| Work Order: _____   |      |      | DISPOSITION                        |   |   | AGAINST DEPARTMENT/PROCESS                    |                                       |                                       |   |   |                                       |                                       |                                       |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
|---|------|------|------------------------------------|---|---|---|---------------------------------------|---------------------------------------|---|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|--|---|--------------------------------------|---|---|-----------------------------------|--|--|--|
|   |      |      | Rework<br><input type="checkbox"/> | Scrap<br><input type="checkbox"/>                   | Use-as-is<br><input type="checkbox"/>   | Work Order Update<br><input type="checkbox"/> | Skid-tube<br><input type="checkbox"/> | Machining<br><input type="checkbox"/> | Thermoforming<br><input type="checkbox"/> | Large Fab<br><input type="checkbox"/>   | Crosstube<br><input type="checkbox"/> | Small Fab<br><input type="checkbox"/> | Finishing<br><input type="checkbox"/> | Composite<br><input type="checkbox"/> | Water Jet<br><input type="checkbox"/>  | Prod. Eng. Coor.<br><input type="checkbox"/> | Rec/Store/Packaging<br><input type="checkbox"/> | Supplier<br><input type="checkbox"/> | Engineering<br><input type="checkbox"/> | Quality<br><input type="checkbox"/>   | Other<br><input type="checkbox"/> |  |  |  |
| Root Cause  | Date | Step | Qty                                | Description of work order update or Non-conformance |   | Initial Chief Eng                             | Action Description                    |                                       |   | Sign & Date   | Verification                          |                                       | QC Inspector                          |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
| Doc/Data  |      |      |                                    |   |   |   |                                       |                                       |   |   |                                       |                                       |                                       |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
| Equip/Tooling   |      |      |                                    |   |   |   |                                       |                                       |   |   |                                       |                                       |                                       |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
| Operator  |      |      |                                    |   |   |   |                                       |                                       |   |   |                                       |                                       |                                       |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
| Material  |      |      |                                    |   |   |   |                                       |                                       |   |   |                                       |                                       |                                       |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
| Setup   |      |      |                                    |   |   |   |                                       |                                       |   |   |                                       |                                       |                                       |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
| Other   |      |      |                                    |   |   |   |                                       |                                       |   |   |                                       |                                       |                                       |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
| Process   |      |      |                                    |   |   |   |                                       |                                       |   |   |                                       |                                       |                                       |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
| Supplier  |      |      |                                    |   |   |   |                                       |                                       |   |   |                                       |                                       |                                       |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
| Training  |      |      |                                    |   |   |   |                                       |                                       |   |   |                                       |                                       |                                       |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
| Unapproved  |      |      |                                    |   |   |   |                                       |                                       |   |   |                                       |                                       |                                       |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
| FAULT CATEGORY  |      |      |                                    |   |   |   |                                       |                                       |   |   |                                       |                                       |                                       |                                       |  |  |   |                                      |   |   |                                   |  |  |  |
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube |      |      |                                    |   | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio |   |                                       |                                       |   | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions |                                       |                                       |                                       |                                       | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge |  |   |                                      |   | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled |                                   |  |  |  |

Work Order ID 105320

\*105320\*

Page 2

August-01-13 11:23:32 AM

Item ID: D3136-043

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Window Assembly

Stop

\*NS2\*

Start Date: 8/01/13 Start Qty: 4.00

\*4\*

Cust Item ID:

Required Date: 8/01/13 Req'd Qty: 4.00

\*4\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

| Sequence ID/<br>Work Center ID                             | Operation<br>Description  | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 130<br><b>*130*</b><br>Thermoform<br>Thermoforming Machine | THERMOFORMING MACHINE<br><br>Memo<br>1-Deburr if necessary ✓<br><br>2-Thermoform as per Dwg D3136 and Folio FTA002<br>Dwg Rev. <u>E</u><br><br>Folio Rev. <u>C</u><br><br>3- Engrave Part # and Batch # , and affix labels<br>(D3136-3) | 0.00                 |         |        |              | x6            |               |                  | Dh<br>13/10/29 |
| 140<br><b>*140*</b><br>Thermoform<br>Thermoforming Machine | HAND FINISHING THERMOFORMING<br><br>Memo<br>Water sand and buff to remove scratches as required   | 0.00                 |         |        |              | x6            |               |                  | Dh<br>13/10/29 |

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| Work Order: _____ |      |      | DISPOSITION                        |   |  | AGAINST DEPARTMENT/PROCESS                    |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
|-------------------|------|------|------------------------------------|---|--|---|---|---------------------------------------|---|--|---|---|--|--|---------------------------------------|--|---|--------------------------------------|---|---|---|---|-------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|--------------------------------------|---|---|---|--|-------------------------------------|------------------------------------|--|---|--|--------------------------------------|--|--|---|--|--|--|---|
|                   |      |      | Rework<br><input type="checkbox"/> | Scrap<br><input type="checkbox"/>                   | Use-as-is<br><input type="checkbox"/>                    | Work Order Update<br><input type="checkbox"/> | Skid-tube<br><input type="checkbox"/>       | Machining<br><input type="checkbox"/> | Thermoforming<br><input type="checkbox"/> | Large Fab<br><input type="checkbox"/>                | Crosstube<br><input type="checkbox"/>       | Small Fab<br><input type="checkbox"/>                 | Finishing<br><input type="checkbox"/>        | Composite<br><input type="checkbox"/>          | Water Jet<br><input type="checkbox"/> | Prod. Eng. Coor.<br><input type="checkbox"/> | Rec/Store/Packaging<br><input type="checkbox"/> | Supplier<br><input type="checkbox"/> | Engineering<br><input type="checkbox"/>   | Quality<br><input type="checkbox"/>     | Other<br><input type="checkbox"/>         |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| Root Cause        | Date | Step | Qty                                | Description of work order update or Non-conformance |  |   | Initial Chief Eng                           | Action Description                    |   |  | Sign & Date                                 | Verification  |  | QC Inspector                                   |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| Doc/Data          |      |      |                                    |   |  |   |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| Equip/Tooling     |      |      |                                    |   |  |   |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| Operator          |      |      |                                    |   |  |   |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| Material          |      |      |                                    |   |  |   |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| Setup             |      |      |                                    |   |  |   |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| Other             |      |      |                                    |   |  |   |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| Process           |      |      |                                    |   |  |   |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| Supplier          |      |      |                                    |   |  |   |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| Training          |      |      |                                    |   |  |   |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| Unapproved        |      |      |                                    |   |  |   |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| FAULT CATEGORY    |      |      |                                    |   |  |   |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
| Landing Gear      |      |      |                                    | General   |  |   |   |                                       |   |  |   |   |  |  |                                       |  |   |                                      |   |   |   |   |                                     |                                    |                                   |                                   |                                      |   |   |   |  |                                     |                                    |  |   |  |                                      |  |  |   |  |  |  |   |
|                   |      |      |                                    | Bending<br><input type="checkbox"/>                 | Centre Not Concentric to O/S<br><input type="checkbox"/> | Cracks<br><input type="checkbox"/>            | Crushed/Crimped<br><input type="checkbox"/> | Cuffs<br><input type="checkbox"/>     | Heat Treat<br><input type="checkbox"/>    | Inspection Strip in Tube<br><input type="checkbox"/> | Ripples in Bend<br><input type="checkbox"/> | Torque Waves in Extrusion<br><input type="checkbox"/> | Turning Sequence<br><input type="checkbox"/> | Wave/Twist in Tube<br><input type="checkbox"/> | Bend<br><input type="checkbox"/>      | BOM/Route<br><input type="checkbox"/>        | Broken/Damaged<br><input type="checkbox"/>      | Burrs<br><input type="checkbox"/>    | Contamination<br><input type="checkbox"/> | Countersink<br><input type="checkbox"/> | Cut Too Short<br><input type="checkbox"/> | Drill Holes<br><input type="checkbox"/> | Drawing<br><input type="checkbox"/> | Finish<br><input type="checkbox"/> | Folio<br><input type="checkbox"/> | Grain<br><input type="checkbox"/> | Hardware<br><input type="checkbox"/> | Inspection Incomplete<br><input type="checkbox"/> | Instructions Incomplete/Unclear<br><input type="checkbox"/> | Maintenance<br><input type="checkbox"/> | Mislabeled<br><input type="checkbox"/> | Misread<br><input type="checkbox"/> | Offset<br><input type="checkbox"/> | Out of Calibration<br><input type="checkbox"/> | Out of Sequence<br><input type="checkbox"/> | Outside Dimensions<br><input type="checkbox"/> | Ovalized<br><input type="checkbox"/> | Over/Under tolerance<br><input type="checkbox"/> | Part Incorrect<br><input type="checkbox"/> | Part Lost/Missing<br><input type="checkbox"/> | Part Moved<br><input type="checkbox"/> | Positioned Wrong<br><input type="checkbox"/> | Power Loss/Surge<br><input type="checkbox"/> | Pressure/Forced<br><input type="checkbox"/> |

Work Order ID 105320

\*105320\*

Page 3

August-01-13 11:23:32 AM

Item ID: D3136-043

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Window Assembly

Stop

\*NS2\*

Start Date: 8/01/13 Start Qty: 4.00

\*4\*

Cust Item ID:

Required Date: 8/01/13 Req'd Qty: 4.00

\*4\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_

Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

\*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

150

\*150\*

QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

0.00

0.00

170

\*170\*

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Sum  
13 10 29

6

180

\*180\*

Packaging

Packaging

Identify as per dwg & Stock Location: ST209 0.00

Memo

0.00

DAS  
28  
9.89

13-10-30

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| Work Order: _____<br>Part No. _____<br>NCR No. _____  |      |      | <b>DISPOSITION</b><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> |   | <b>AGAINST DEPARTMENT/PROCESS</b><br>Skid-tube <input type="checkbox"/><br>Machining <input type="checkbox"/><br>Thermoforming <input type="checkbox"/><br>Large Fab <input type="checkbox"/><br>Crosstube <input type="checkbox"/><br>Small Fab <input type="checkbox"/><br>Finishing <input type="checkbox"/><br>Composite <input type="checkbox"/><br>Water Jet <input type="checkbox"/><br>Prod. Eng. Coor. <input type="checkbox"/><br>Rec/Store/Packaging <input type="checkbox"/><br>Supplier <input type="checkbox"/><br>Engineering <input type="checkbox"/><br>Quality <input type="checkbox"/><br>Other <input type="checkbox"/> |                   |   |             |              |              |  |               |   |          |
|---|------|------|---|---|---|-------------------|---|-------------|--------------|--------------|--|---------------|---|----------|
| Root Cause  | Date | Step | Qty   | Description of work order update or Non-conformance   |   | Initial Chief Eng | Action Description  | Sign & Date | Verification | QC Inspector |  |               |   |          |
|   |      |      |   |   |   |                   |   |             |              |              | Doc/Data   | Equip/Tooling | Operator  | Material |
| <b>FAULT CATEGORY</b>   |      |      |   |   |   |                   |   |             |              |              |  |               |   |          |
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube |      |      |   | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio |   |                   | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions |             |              |              | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge |               | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled |          |
|   |      |      |   | <input type="checkbox"/> Other  |   |                   |   |             |              |              |  |               |   |          |

Work Order ID 105320

\*105320\*

Page 4

August-01-13 11:23:32 AM

Item ID: D3136-043

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Window Assembly

Stop

\*NS2\*

Start Date: 8/01/13 Start Qty: 4.00

\*4\*

Cust Item ID:

Required Date: 8/01/13 Req'd Qty: 4.00

\*4\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run

Start

\*NR1\*

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

190

QC21- Final Inspection - Work Order Release

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

\*190\*

QC

Quality Control

Memo

0.00

13/10/31 JJ

UMF

13-10-30

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| Work Order: _____   |  |  | DISPOSITION                        |   |   | AGAINST DEPARTMENT/PROCESS           |                    |   |             |              |              |  |  |   |  |
|---|--|--|------------------------------------|---|---|--------------------------------------|--------------------|---|-------------|--------------|--------------|--|--|---|--|
| Part No. _____  | Rework <input type="checkbox"/>            | Scrap <input type="checkbox"/>         | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>        | Engineering <input type="checkbox"/> |                    |   |             |              |              |  |  |   |  |
| NCR No. _____   | Use-as-is <input type="checkbox"/>         | Thermoforming <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/>  | Prod. Eng. Coor. <input type="checkbox"/> | Quality <input type="checkbox"/>     |                    |   |             |              |              |  |  |   |  |
|   | Work Order Update <input type="checkbox"/> | Large Fab <input type="checkbox"/>     | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/>  | Supplier <input type="checkbox"/>         | Other <input type="checkbox"/>       |                    |   |             |              |              |  |  |   |  |
| Root Cause  | Date                                       | Step                                   | Qty                                | Description of work order update or Non-conformance   |   | Initial Chief Eng                    | Action Description |   | Sign & Date | Verification | QC Inspector |  |  |   |  |
| Doc/Data  |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
| Equip/Tooling   |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
| Operator  |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
| Material  |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
| Setup   |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
| Other   |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
| Process   |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
| Supplier  |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
| Training  |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
| Unapproved  |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
| FAULT CATEGORY  |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube |  |  |                                    | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio |   |                                      |                    | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions |             |              |              | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge |  | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled |  |
|   |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  | <input type="checkbox"/> Other  |  |
|   |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
|   |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |
|   |  |  |                                    |   |   |                                      |                    |   |             |              |              |  |  |   |  |

# Picklist Print

August-01-13 11:23:32 AM

Page 1

Work Order ID: 105320

Parent Item: D3136-043

Parent Item Name: Window Assembly

Start Date: 8/01/13

Required Date: 8/01/13

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A04.02.04New issueKJ/DS

IPP Rev.B 07.05.29 Thermoform in-house DL

IPP rev C 07.09.28 Rev E dwg EC verified by:DD IPP Rev:D 10.06.24 added note in qc5  
seq 170 DD verf:EC

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D3108-9<br>Decal                |                        | Manufactured  | No          |                     |                  | 100             | Each               | 464.0000       | 2           | 8            |               |                | DL     |

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| ST026    | 464     |          |
| 34554    | 18      |          |
| 46546    | 446     |          |

13/10/29

|  |           |    |  |     |    |          |     |      |    |            |
|--|-----------|----|--|-----|----|----------|-----|------|----|------------|
| MACRLICS.125<br>1/8" Polycast II Sheet | Purchased | No |  | 170 | sf | 661.8445 | 3.9 | 15.0 | 28 | JM13-10-27 |
|--|-----------|----|--|-----|----|----------|-----|------|----|------------|

| Location | Loc Qty  | Loc Code |
|----------|----------|----------|
| MAT      | 211      |          |
| m125767  | 211      |          |
| MAT019   | 171.1    |          |
| 123704   | 33       |          |
| 123949   | 68.5     |          |
| 124559   | 69.6     |          |
| ther     | 279.7445 |          |
| 123895   | 279.7445 |          |

125767

125767

125767

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| Work Order: _____            |         |      | DISPOSITION                                |   |  | AGAINST DEPARTMENT/PROCESS                   |                                      |   |   |              |              |
|------------------------------|---------|------|--|---|--|--|--------------------------------------|---|---|--------------|--------------|
| Part No. _____               |         |      | Rework <input type="checkbox"/>            | Skid-tube <input type="checkbox"/>                  | Crosstube <input type="checkbox"/>                       | Water Jet <input type="checkbox"/>           | Engineering <input type="checkbox"/> |   |   |              |              |
| NCR No. _____                |         |      | Scrap <input type="checkbox"/>             | Machining <input type="checkbox"/>                  | Small Fab <input type="checkbox"/>                       | Prod. Eng. Coor. <input type="checkbox"/>    | Quality <input type="checkbox"/>     |   |   |              |              |
|                              |         |      | Use-as-is <input type="checkbox"/>         | Thermoforming <input type="checkbox"/>              | Finishing <input type="checkbox"/>                       | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>       |   |   |              |              |
|                              |         |      | Work Order Update <input type="checkbox"/> | Large Fab <input type="checkbox"/>                  | Composite <input type="checkbox"/>                       | Supplier <input type="checkbox"/>            |                                      |   |   |              |              |
| Root Cause                   | Date    | Step | Qty  | Description of work order update or Non-conformance |  | Initial Chief Eng                            | Action Description                   |   | Sign & Date                                 | Verification | QC Inspector |
| Doc/Data                     |         |      |  |   |  |  |                                      |   |   |              |              |
| Equip/Tooling                |         |      |  |   |  |  |                                      |   |   |              |              |
| Operator                     |         |      |  |   |  |  |                                      |   |   |              |              |
| Material                     |         |      |  |   |  |  |                                      |   |   |              |              |
| Setup                        |         |      |  |   |  |  |                                      |   |   |              |              |
| Other                        |         |      |  |   |  |  |                                      |   |   |              |              |
| Process                      |         |      |  |   |  |  |                                      |   |   |              |              |
| Supplier                     |         |      |  |   |  |  |                                      |   |   |              |              |
| Training                     |         |      |  |   |  |  |                                      |   |   |              |              |
| Unapproved                   |         |      |  |   |  |  |                                      |   |   |              |              |
| FAULT CATEGORY               |         |      |  |   |  |  |                                      |   |   |              |              |
| Landing Gear                 |         |      |  | General   |  |  |                                      |   |   |              |              |
| Bending                      | General |      |  | Bend <input type="checkbox"/>                       | Grain <input type="checkbox"/>                           |  |                                      | Ovalized <input type="checkbox"/>             | Pressure/Forced <input type="checkbox"/>    |              |              |
| Centre Not Concentric to O/S |         |      |  | BOM/Route <input type="checkbox"/>                  | Hardware <input type="checkbox"/>                        |  |                                      | Over/Under tolerance <input type="checkbox"/> | Temperature/Cure <input type="checkbox"/>   |              |              |
| Cracks                       |         |      |  | Broken/Damaged <input type="checkbox"/>             | Inspection Incomplete <input type="checkbox"/>           |  |                                      | Part Incorrect <input type="checkbox"/>       | Weld <input type="checkbox"/>               |              |              |
| Crushed/Crimped              |         |      |  | Burrs <input type="checkbox"/>                      | Instructions Incomplete/Unclear <input type="checkbox"/> |  |                                      | Part Lost/Missing <input type="checkbox"/>    | Wrong Stock Pulled <input type="checkbox"/> |              |              |
| Cuffs                        |         |      |  | Contamination <input type="checkbox"/>              | Maintenance <input type="checkbox"/>                     |  |                                      | Part Moved <input type="checkbox"/>           |   |              |              |
| Heat Treat                   |         |      |  | Countersink <input type="checkbox"/>                | Mislabeled <input type="checkbox"/>                      |  |                                      | Positioned Wrong <input type="checkbox"/>     |   |              |              |
| Inspection Strip in Tube     |         |      |  | Cut Too Short <input type="checkbox"/>              | Misread <input type="checkbox"/>                         |  |                                      | Power Loss/Surge <input type="checkbox"/>     |   |              |              |
| Ripples in Bend              |         |      |  | Drill Holes <input type="checkbox"/>                | Offset <input type="checkbox"/>                          |  |                                      | Other <input type="checkbox"/>                |   |              |              |
| Torque Waves in Extrusion    |         |      |  | Drawing <input type="checkbox"/>                    | Out of Calibration <input type="checkbox"/>              |  |                                      |   |   |              |              |
| Turning Sequence             |         |      |  | Finish <input type="checkbox"/>                     | Out of Sequence <input type="checkbox"/>                 |  |                                      |   |   |              |              |
| Wave/Twist in Tube           |         |      |  | Folio <input type="checkbox"/>                      | Outside Dimensions <input type="checkbox"/>              |  |                                      |   |   |              |              |

|                                   |              |             |
|-----------------------------------|--------------|-------------|
| DART AEROSPACE LTD                | Work Order:  | 105320      |
| Description: Window Assembly      | Part Number: | D3136-043   |
| Inspection Dwg: D3136      Rev: E |              | Page 1 of 1 |

## FIRST ARTICLE INSPECTION CHECKLIST

## X First Article      Prototype

|                        |                       |                         |
|------------------------|-----------------------|-------------------------|
| Measured by: <u>Jm</u> | Audited by: <u>Dh</u> | Prototype Approval: N/A |
| Date: <u>13-10-27</u>  | Date: <u>13/10/28</u> | Date: N/A               |

| Rev | Date     | Change    | Revised by | Approved  |
|-----|----------|-----------|------------|---|
| A   | 07.10.19 | New Issue | KJ/EC/DD   |  |



